



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

March 23, 1993

Mr. Dennis aRusso
Central Landfill
Rhode Island Solid Waste Management Corporation
65 Shun Pike
Johnston, RI 02919

RE: EPA comments to the Upper Simmons Reservoir Sediment Study
Phase I Report/Phase II Work Plan, Operable Unit 2 Remedial
Investigation - Task 1, February 1993.

Dear Mr. aRusso:

EPA has completed its review of the subject Report/Work Plan for the sediment sampling in Upper Simmons Reservoir. In general the reporting on the Phase I effort and the Work Plan for the Phase II effort was acceptable. The results of the Phase I effort did not show a severe contaminant problem from an ecological risk standpoint, however based on the information at hand the situation is marginal and an ecological risk assessment will be needed upon completion of the Phase II effort. Also, as GZA notes in the Work Plan, a real issue is the potential toxicity of the inorganic sediments to the biota during the planned dredging operation. Therefore, EPA requires that sediment elutriate toxicity testing be added to the Phase II Work Plan in order to evaluate this issue. Sediment elutriate toxicity tests are fairly standard tests used for dredging projects by the Army Corps of Engineers.

Additional comments to the Report/Work Plan are provided as follows:

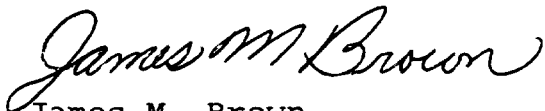
1. Page 2, 2.00, Paragraph 2, last sentence: The sentence states that SED92-5 and SED92-6 were moved because field observations suggested that alternative locations would provide more useful information and refers the reader to Section 3.10. However, the indicators that led to this decision, and the assumptions and method behind this decision are never fully discussed.
2. Page 5, 3.10, Paragraph 2: The paragraph discusses that sediment thicknesses estimated by GZA is approximately 50% thinner than the thickness estimated by Maguire Group Inc. This discrepancy is never fully explained and appears to be rather high.



3. Page 7, 3.31, Paragraph 3: The conclusion that metal bioavailability can be negatively correlated with an increase in TOC is tenuous, and should not be made.
4. Page 7, 3.31, Paragraph 5: The paragraph discusses how two of the original sediment samples were grouped with the landfill derived sediments. While this grouping may be justified based on TOC content it may not be justified in terms of the objective to determine differential impacts from landfill derived sediments and original sediments.
5. Page 10, 4.10, Paragraph 2: The comparison of concentrations of metals in the sediments with background ranges in soils of the United States is completely inappropriate and should be deleted. Comparisons with sediment concentrations upstream of the landfill influence should be made.
6. Page 13, 5.31, Paragraph 2 and Table 5: The CLP/TAL target suite for metals identified from the Phase I results was based on the 13 Priority Pollutant metals not the full TAL analyte list as stated. The analytes aluminum, barium, calcium, cobalt, iron, magnesium, manganese, potassium, sodium, vanadium and cyanide are TAL analytes not included in the Priority Pollutant list. For the sample locations identified in Table 5 that will not be subjected to the full CLP/TAL analysis provide justification for not including the TAL analytes above that were not analyzed for during Phase I of OU2 Task 1.
7. Table 1: This table suggests that there is some significant scatter to the data. Perhaps additional replicate samples should be taken in an attempt to explain this variability.

If you have any questions please call me at (617) 573-5779.

Sincerely,



James M. Brown
Remedial Project Manager
Waste Management Division

cc: D. Boynton, EPA
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